## What is claimed is:

- 1. A burner nozzle, comprising:
- a) an inner conduit, and
- b) an outer conduit, the outer conduit being disposed generally concentrically around the inner conduit, the inner and outer conduits defining an outlet end, the inner and outer conduits terminating in a vicinity of the outlet end,
- c) the outer conduit being tapered such that the outer conduit has a diameter which decreases towards the outlet end.
- d) the inner conduit being defined by a generally cylindrical inner piece which has a rounded edge in a vicinity of the outlet end.
- 2. The burner nozzle of Claim 1, wherein the inner piece is longitudinally translatable.
- 3. The burner nozzle of Claim 2, wherein the inner piece can be moved between a first extreme position wherein the edge of the inner piece is generally aligned with an edge of the outer conduit, and a second extreme position wherein the edge of the inner piece is recessed from the outlet end.
- 4. The burner nozzle of Claim 3, further comprising means for locking the inner piece in a desired position.
- 5. The burner nozzle of Claim 4, wherein the outer conduit is defined by an outer piece, wherein the inner piece is attached to an inner pipe, and wherein the outer piece is attached to an outer pipe.
- 6. The burner nozzle of Claim 1, wherein the nozzle is free of any external barrier downstream of the nozzle.
  - A burner nozzle, comprising:
  - a) inner and outer pieces, the inner piece defining a fuel conduit,

the outer piece defining a gas conduit disposed around the fuel conduit, the inner and outer pieces defining an outlet end of the nozzle,

- b) wherein the gas conduit has a diameter that decreases in a direction of the outlet end, and
- c) the inner piece having a rounded edge in a vicinity of the outlet end.
- 8. The burner nozzle of Claim 7, wherein the inner piece is longitudinally translatable relative to the outer piece.
- 9. The burner nozzle of Claim 8, further comprising means for limiting an amount of longitudinal translation available to the inner piece.
  - 10. A burner nozzle, comprising:
- a) inner and outer pieces, the inner piece defining a fuel conduit, the outer piece defining a gas conduit disposed around the fuel conduit, the inner and outer pieces defining an outlet end of the nozzle,
- b) wherein the inner piece has a rounded edge in a vicinity of the outlet end.
- 11. The burner nozzle of Claim 10, wherein the inner piece is longitudinally translatable.
- 12. The burner nozzle of Claim 11, further comprising means for limiting an amount of longitudinal translation available to the inner piece.
- 13. The burner nozzle of Claim 10, wherein the nozzle is free of any external barrier downstream of the nozzle.
  - 14. A burner, comprising:
- a) a nozzle comprising an inner piece and an outer piece, the inner piece having a generally cylindrical structure defining a conduit for fuel, the outer piece being spaced from the inner piece so as to define a tapered

conduit for gas, the nozzle having an outlet end, the tapered conduit having a diameter which decreases towards the outlet end,

- b) the inner piece being connected to an inner pipe having a length which exceeds a length of the inner piece,
- c) the outer piece being connected to an outer pipe having a length which exceeds a length of the outer piece,
- d) the inner piece and the inner pipe being longitudinally translatable within limits.
- 15. The burner of Claim 14, further comprising means for locking the inner piece and the inner pipe in a desired position.
- 16. The burner of Claim 14, wherein the inner piece has a rounded edge in a vicinity of the outlet end.
- 17. The burner of Claim 15, wherein the inner piece has a rounded edge in a vicinity of the outlet end.
- 18. The burner of Claim 14, wherein the inner and outer pipes are arranged in a generally concentric orientation, wherein the inner pipe is longitudinally translatable relative to the outer pipe.
- 19. The burner of Claim 14, wherein the inner piece and the inner pipe are threadedly connected.
- 20. The burner of Claim 14, wherein the outer piece and the outer pipe are threadedly connected.